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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,797	07/18/2000	Toshio Yamada	WATK : 197	8862

7590 10/05/2004

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EXAMINER

DOROSHENK, ALEXA A

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/618,797

Applicant(s)

YAMADA ET AL.

Examiner

Alexa A. Doroshenk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/21/00 & 1/11/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Claims 1-11 in the reply filed on July 14, 2004 is acknowledged. The traversal is on the ground(s) that the subject matter of claims is sufficiently related that the search and examination of the entire application could be made without serious burden. This is not found persuasive because establishing that the inventions are classified in different classes and/or subclasses establishes that a serious burden exists on the examiner if restriction is not required.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: in figure 1D numbers 10a, 10b and 15; in figure 2D numbers 10a, 10b, 15 and 15b. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Figure 4 and possibly figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Regarding claim 8, the phrase "like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).
6. Regarding claim 9, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosynsky et al. (4,142,864).

With respect to claims 1 and 5, Rosynsky et al. discloses a structure which comprises a ceramic honeycomb (28), a metal case (12), a holding material (42/43) and an impermeable layer (45) on an edge of the holding material (see figures 1 and 3).

With respect to claim 3, the pressure properties of the impermeable layer (45) are approximately equal to or less than those of the holding material (42/43) (col. 2, lines 50-66).

With respect to claim 4, it is illustrated in figures 1 and 3 that at least one edge of the holding material having the impermeable layer (45) is approximately on the same plane as an edge plane of the honeycomb structure (28).

9. Claims 1, 4, 5, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Close et al. (3,959,865).

With respect to claims 1 and 5, Close et al. discloses a structure which comprises a ceramic honeycomb (20), a metal case (10), a holding material (30) and an impermeable layer (22) on an edge of the holding material (see figure 1).

With respect to claim 4, it is illustrated in figure 1 that at least one edge of the holding material having the impermeable layer (22) is approximately on the same plane as an edge plane of the honeycomb structure (20).

With respect to claims 6, 8 and 9, Close et al. further disclose wherein the impermeable material (22) is a thin film of paper which is impregnated with impermeable matter (col. 3, line 55- col. 4, line 24).

10. Claims 1, 4, 5, 7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Harding (6,017,498).

With respect to claims 1 and 5, Harding discloses a structure which comprises a ceramic honeycomb (6), a metal case (4), a holding material (8, 8') and an impermeable layer (38) made of a rope (col. 3, lines 52-55) on an edge of the holding material (see figures 1 and 3).

With respect to claim 4, it is illustrated in figures 1 and 3 that at least one edge of the holding material having the impermeable layer (38) is approximately on the same plane as an edge plane of the honeycomb structure (6).

With respect to claims 7 and 9, Harding discloses wherein the impermeable layer (38) made of a circular cross sectional rope (col. 3, lines 52-55) and impregnated with impermeable matter (col. 3, line 65- col. 4, line 4).

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11. Claims 1, 4, 5, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Machida et al. (5,782,089).

With respect to claims 1 and 5, Machida et al. discloses a structure which comprises a ceramic honeycomb (1), a metal case (2), a holding material (3) and an impermeable layer (4) on an edge of the holding material (see figure 1).

With respect to claim 4, it is illustrated in figures 1-5 that at least one edge of the holding material having the impermeable layer (4) is approximately on the same plane as an edge plane of the honeycomb structure (1).

With respect to claim 11, Machida et al. further discloses wherein the holding material (3) is a ceramic fiber mat in a compressed state (col. 3, lines 36-41).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2, 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosynsky et al. (4,142,864).

With respect to claim 2, the apparatus of Rosynsky et al. is substantially the same as that of the instant claim, but is silent as to the specific length of the impermeable layer.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select an appropriate size for the impermeable layer on the

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basis of its suitability for the intended use, absent showing any unexpected results, and since it has been held that when the only difference between the prior art device and a claim is a recitation of relative size, and the device with the relative size would not perform differently than that prior art device, the claimed device is not patentably distinct.

With respect to claim 3, the pressure properties of the impermeable layer (45) are approximately equal to or less than those of the holding material (42/43) (col. 2, lines 50-66).

With respect to claim 10, the apparatus of Rosynsky et al. is substantially the same as that of the instant claim and discloses that the walls of the honeycomb structure are "often be in the range of 2 to 25 mils or more" but also discloses that the "size and dimensions of the unitary refractory skeletal support of this invention can be varied" (col. 8, lines 20-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to select an appropriate size for the honeycomb partition thickness on the basis of its suitability for the intended use, absent showing any unexpected results, and since it has been held that when the only difference between the prior art device and a claim is a recitation of relative size, and the device with the relative size would not perform differently than that prior art device, the claimed device is not patentably distinct and since Rosynsky et al. recognizes the ability to vary the size of the elements of the device.

14. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Close et al. (3,959,865).

The apparatus of Close et al. is substantially the same as that of the instant claim, but is silent as to the specific length of the impermeable layer.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select an appropriate size for the impermeable layer on the basis of its suitability for the intended use, absent showing any unexpected results, and since it has been held that when the only difference between the prior art device and a claim is a recitation of relative size, and the device with the relative size would not perform differently than that prior art device, the claimed device is not patentably distinct.

15. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harding (6,017,498).

The apparatus of Harding is substantially the same as that of the instant claim, but is silent as to the specific length of the impermeable layer.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select an appropriate size for the impermeable layer on the basis of its suitability for the intended use, absent showing any unexpected results, and since it has been held that when the only difference between the prior art device and a claim is a recitation of relative size, and the device with the relative size would not perform differently than that prior art device, the claimed device is not patentably distinct.

16. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Machida et al. (5,782,089).

The apparatus of Machida et al. is substantially the same as that of the instant claim, but is silent as to the specific length of the impermeable layer.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select an appropriate size for the impermeable layer on the basis of its suitability for the intended use, absent showing any unexpected results, and since it has been held that when the only difference between the prior art device and a claim is a recitation of relative size, and the device with the relative size would not perform differently than that prior art device, the claimed device is not patentably distinct.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa A. Doroshenk whose telephone number is 571-272-1446. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alexa A. Doroshenk
Examiner
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